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AGRICULTURE/FORESTRY
HYDROLOGY

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Type II Quarterly Report

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TYPE II QUARTERLY REPORT

I. INTRODUCTION

The main objectives of the Mekong Committee investigations using LANDSAT-2 data are as follows :

A. Short-term objectives

By both photo-interpretation and automatic data processing techniques, supported by ground truth data and field surveys, establish :

- Land use, land capability and hydro-geomorphology maps of the lower Mekong basin;
- Maps showing primary forests and deciduous forest areas;
- Maps showing consecutive flood and drainage patterns of Mekong lowlands.

B. Long-term objectives

Organise a research programme for classification of agricultural crops and land use, and for soil moisture monitoring for crop forecasting.

II. TECHNIQUES

1. Data quality and delivery

The data output received during the period under review is listed in Annex 1.

The imageries were ordered retroactively following the instruction on data acquisition set by NASA in its letter of 24 September 1976. All scenes were acquired by NASA during the month of February 1976.

It should be pointed out that since February 1976, NASA does not acquire any data output from LANDSAT-2 covering our investigation area. This is evidenced by the monthly catalog of LANDSAT-2 which did not have any reference to data output covering the Mekong basin.

For our continuing work on many aspects at least there is a need of data output during the period from April to August 1977.

2. Preparation of land use, land capability and morpho-pedologic maps

No new development during the period under review.

3. Research programme for computer processing of remote sensing data

No new development during the period under review.

III. ACCOMPLISHMENTS DURING THE PERIOD UNDER REVIEW

1. Preparation of land use, land capability and morpho-pedologic map

The land use map at the scale of 1:1,000,000 was published with descriptive legend in English and in French. The two sheets of the land use map are attached.

The morpho-pedologic map is being published. It is expected to include the published map in the next quarterly report.

Preparation of sketches for the land capability map is almost finished.

Also is being prepared a report on the methodologies used for the thematic mapping programme.

2. Research programme for computer processing of remote sensing data

The research programme was completed in three phases as follows :

(i) Study programme functions of the RECOG package and convert every machine dependent language sub-routine to FORTRAN sub-routine;

(ii) Set up input test data corresponding to the grammatical words used in RECOG on the multi-spectral data of LANDSAT computer compatible tapes and improve the RECOG programme package, such as eliminating redundant sub-routines and re-organizing the input/output handling routines;

(iii) With the supplemental study on ground truth observation carried out from August 1975 to August 1976, the classification work was performed on the LANDSAT computer compatible tapes over the areas which the ground observations were taken.

The final report entitled "Computer Processing of Remotely Sensed Data" is being published. It is expected that the next quarterly report will enclose this document.

IV. CONCLUSIONS

During the period under review good progress has been made towards the objectives of our investigations.

However we intend to pursue our research in many other fields using LANDSAT data output. Consequently we request that NASA continue to acquire data output covering our investigation area, at least during the period from April to August 1977 as earlier mentioned.

ANNEX 1

LIST OF LANDSAT-2 IMAGERY

RECEIVED BY THE MEKONG SECRETARIAT

(Period December 1976-February 1977)

ID number		Date acquired (month, day, year)		
1	8 2375 02294	02	01	76
2	8 2375 02301	02	01	76
3	8 2375 02303	02	01	76
4	8 2375 02310	02	01	76
5	8 2376 02344	02	02	76
6	8 2376 02350	02	02	76
7	8 2376 02353	02	02	76
8	8 2377 02395	02	03	76
9	8 2377 02404	02	03	76
10	8 2377 02411	02	03	76
11	8 2377 02402	02	03	76
12	8 2378 02454	02	04	76
13	8 2379 02515	02	05	76
14	8 2379 02510	02	05	76
15	8 2397 02500	02	23	76
16	8 2397 02503	02	23	76
17	8 2398 02555	02	24	76
18	8 2398 02561	02	24	76
19	8 2399 03013	02	25	76
20	8 2399 03015	02	25	76

Note : All imageries are within the investigation area
(Mekong basin)